

Customer No.: 31561
Application No.: 10/604,839
Docket No.: 10763-US-PA

In The Claims:

Claim 1. (currently amended) A circuit for automatically adjusting an operation voltage of an active matrix organic light emitting diode ("AMOLED"), comprising:

a display panel of an AMOLED having a cathode terminal of an organic light emitting diode ("OLED"); and

an auto-adjusting circuit connected to the cathode terminal of the OLED, wherein a current passing through the cathode terminal of the OLED is detected by the auto-adjusting circuit, and a voltage applied to the cathode terminal of the OLED is adjusted by the auto-adjusting circuit according to the current detected.

Claim 2. (currently amended) The circuit of claim 1, wherein the auto-adjusting circuit comprising:

a resistor for generating a sensing voltage, wherein the sensing voltage is generated according to the detected current of the cathode terminal of the OLED;

a subtracting circuit connected to the resistor for computing a voltage difference between the sensing voltage and the voltage applied to the cathode terminal of the OLED;

a comparing circuit for comparing the voltage difference with a reference voltage in order to provide a control signal; and

a digital processor connected to the comparing circuit for automatically adjusting the voltage applied to the cathode terminal of the OLED according to the control signal.

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Claim 3. (original) The circuit of claim 2, wherein the resistance of the resistor is less than about 10 ohm.

Claim 4. (currently amended) The circuit of claim 2, wherein the reference voltage is computed according to a standard value of the current passing through the cathode terminal of the OLED.

Claim 5. (currently amended) A method for automatically adjusting an operation voltage of an active matrix organic light emitting diode ("AMOLED"), comprising:

sensing a current of the cathode terminal of a OLED; and

adjusting a voltage applied to the cathode terminal of the OLED according to the sensed current of the cathode terminal of the OLED automatically.